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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,164

09/20/2005

Erik V. Rencs

10296-066US1

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26161 7590 04/18/2007

FISH & RICHARDSON PC

P.O. BOX 1022

MINNEAPOLIS, MN 55440-1022

EXAMINER

PHAM, HOA Q

ART UNIT

PAPER NUMBER

2886

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/550,164	RENCS ET AL.	
	Examiner	Art Unit	
	Hoa Q. Pham	2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-42 is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-15, 18-28, 30, 31, 33, 34, 37, 38, 43, 45, 47 and 48 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 16, 17, 29, 32, 35, 36, 44, 46 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/20/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Drawings filed on 9/20/05 have been accepted.

Specification

2. Applicant is noted that the "Abstract" filed in PCT application (WO 2004/085670 A2) will be used for the present application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 3, 4, 5/1, 5/3, 6, 7/1, 7/3, 10, 11, 28, 30-31, 33-34, 43, and 45 rejected under 35 U.S.C. 102(b) as being anticipated by Hill (U.S. Pat. No. 6,252,668).

Regarding claims 1, 3, 7, 28, 43, Hill (of record) discloses a polarizing beam splitter (171), that substantially reflects light of a first polarization and substantially transmits light of a second polarization orthogonal to the first polarization; a reflector (192) positioned to reflect light transmitted by the PBS towards the PBS; and a detector (179) positioned to detect light reflected by the PBS and/or light reflected by the reflector (see figure 2a).

Regarding claim 2, the angle between the PBS and reflector is zero.

Regarding claim 4, the angle between the first beam reflected from the PBS and the second beam transmitted from the PBS is 90 degree (see figure 2a).

Regarding claims 5-6 and 30-31, Hill teaches that the use of wavelength of 633 um (column 8, line 26).

Regarding claim 10, see polarizer (177) in figure 2a.

Regarding claim 11, see sample (1122) and components in figure 6a.

Regarding claims 33-34, reflector (192) is a mirror.

Regarding claim 45, the sample in figure 6a is a mask or wafer.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-15, 18-27, 37-38, 47 and 48 rejected under 35 U.S.C. 103(a) as being unpatentable over Hill.

Regarding claims 12-13, 21-27, 37-38, and 47-48; Hill does not explicitly teach that the polarization beam splitter can be used in a system for detecting fluorescence compound; however, it would have been obvious to use a polarization beam splitter in a system which detects fluorescence compound if polarization components are used for detection.

Regarding claims 14-15, see polarization light source 101 in column 18, lines 6-

10 of Hill.

Regarding claims 18-20, see sample (1122) in figure 6a and polarization components in figure 2a.

Allowable Subject Matter

7. Claims 39-42 are allowed.
8. Claims 8, 9, 16, 17, 29, 32, 35, 36, 44, 46, and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

REASONS FOR ALLOWANCE

9. There was no prior art found by the examiner that suggested modification or combination with the cited art so as to satisfy the combination of all the limitations in claim 39. As to claim 39, the prior art of record, taken alone or in combination, fails to disclose or render limitations **“providing a plurality of spatially distinct nucleic acid samples and amplification reagents that comprises a fluorophore attached to a nucleic acid primer; concurrently amplifying each sample of the plurality; and during the amplifying, concurrently detecting fluorescence polarization information associated with the fluorophore from each sample of the plurality, wherein the detecting comprises separating first and second polarity light using an element that reflects first polarity light and transmits second polarity light,**

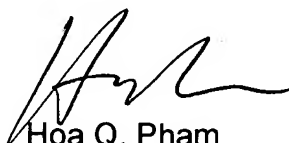
Art Unit: 2886

wherein the first polarity light is polarized in a first plane and the second polarity light is polarized in a plane orthogonal to the first plane”.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on Monday through Friday, 8:00AM TO 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on (571) 272-2287. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Hoa Q. Pham
Primary Examiner
Art Unit 2886

HP
April 11, 2007